## AMENDMENTS TO THE CLAIMS

1-50. (Canceled)

51. (New) A method of forming a non-volatile resistance variable device comprising:

forming a substrate;

forming a projecting metal mass having an exposed outer surface on said substrate;

surrounding said exposed outer surface of said projecting metal mass with chalcogenide material;

diffusing a portion of said projecting metal mass outwardly into a portion of said chalcogenide material; and

forming an electrode over said chalcogenide material.

52. (New) The method of claim 51 wherein the step of forming a projecting metal mass having an exposed outer surface comprises the steps of:

forming a metal layer over said substrate; and

patterning said metal into a projecting metal mass having an exposed outer surface.

53. (New) The method of claim 51 wherein said exposed outer surface of said projecting metal mass comprises a top metal surface joined with opposing side metal surfaces at respective angles.

54. (New) The method of claim 51 wherein said exposed outer surface of said projecting metal mass comprises a top metal surface joined with opposing side metal surfaces at respective angles within about 15 degrees of normal.

55. (New) The method of claim 51 wherein said portion of said projecting metal mass diffused outwardly into said chalcogenide material comprises less than all of said projecting metal.

56. (New) The method of claim 55 wherein said potion of said projecting metal mass not diffused outwardly into said chalcogenide material is smaller but substantially the same shape as said projecting metal mass before said portion of said projecting metal mass is diffused into said chalcogenide material.

57. (New) The method of claim 51 wherein said portion of said projecting metal mass diffused outwardly into said chalcogenide material comprises all of said projecting metal mass.

58. (New) The method of claim 51 wherein the step of surrounding said exposed outer surface of said projecting metal mass with chalcogenide material comprises blanket depositing chalcogenide material.

59. (New) The method of claim 51 wherein the step of diffusing a portion of said projecting metal mass outwardly into said chalcogenide material comprises irradiating through said chalcogenide material to said projecting metal mass.

60. (New) The method of claim 59 wherein said irradiating comprises irradiating through said chalcogenide material to said projecting metal mass with electromagnetic radiation having a wavelength less than about 500 nanometers.

61. (New) The method of claim 60 wherein said electromagnetic radiation has a wavelength of about 404 nanometers to about 408 nanometers.

62. (New) The method of claim 60 wherein said electromagnetic radiation has a wavelength of about 405 nanometers.

63. (New) The method of claim 51 further comprising the step of substantially selectively etching the portion of said chalcogenide material into which said portion of projecting metal mass has not been diffused, before said step of forming an electrode of said chalcogenide material.

64. (New) The method of claim 63 wherein said etching comprises dry anisotropic etching.

65. (New) The method of claim 63 wherein said etching comprises dry anisotropic etching using a gas chemistry comprising $CF_4$.

66. (New) A method of forming a non-volatile resistance variable device comprising:

forming a first metal layer over a substrate;

forming a second metal layer on said first metal layer;

patterning said second metal layer into a structure having an outer surface and exposing said first metal layer;

blanket depositing a chalcogenide material over said substrate on said second metal structure outer surface and on said exposed first metal layer; and

diffusing a portion of said of said patterned second metal outwardly into a portion of said chalcogenide material.

67. (New) The method of claim 66 further comprising the steps of:

substantially selectively etching the portion of said chalcogenide material into which said portion of said patterned second metal has not been diffused; and

after said etching, forming an outer electrode over the remaining portion of said chalcogenide material into which said portion of said patterned second metal has been diffused.

68. (New) The method of claim 67 wherein said etching comprises dry anisotropic etching.

69. (New) The method of claim 67 wherein said etching comprises dry anisotropic etching using a gas chemistry comprising $CF_4$.

70. (New) The method of claim 66 wherein said portion of said patterned second metal diffused outwardly into said chalcogenide material comprises less than all of said patterned second metal.

71. (New) The method of claim 70 wherein said potion of said patterned second metal not diffused outwardly into said chalcogenide material is smaller but substantially the same shape as said patterned second metal before said portion of said patterned second metal is diffused into said chalcogenide material.

72. (New) The method of claim 66 wherein said portion of said patterned second metal diffused outwardly into said chalcogenide material comprises all of said patterned second metal.

73. (New) The method of claim 66 wherein the step of diffusing a portion of said patterned second metal outwardly into said chalcogenide material comprises irradiating through said chalcogenide material to said patterned second metal.

74. (New) The method of claim 73 wherein said irradiating comprising irradiating through said chalcogenide material to said patterned second metal with electromagnetic radiation having a wavelength less than about 500 nanometers.

75. (New) The method of claim 74 wherein said electromagnetic radiation has a wavelength of about 404 nanometers to about 408 nanometers.

76. (New) The method of claim 74 wherein said electromagnetic radiation has a wavelength of about 405 nanometers.